ERS ENDOBRONCHIAL ULTRASOUND (EBUS) TRAINING PROGRAMME - PART 2

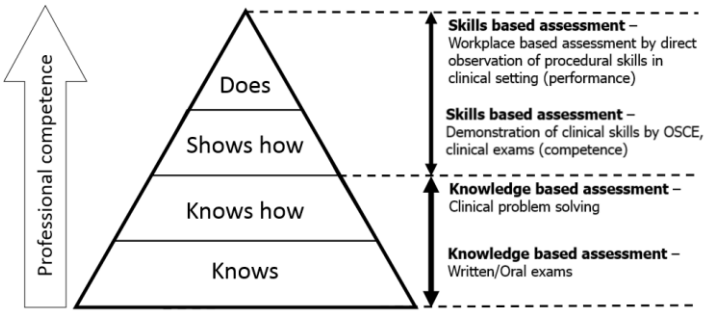
PROGRAMME QUICK LINKS: Amsterdam | Athens | Copenhagen | Heidelberg | Programme explanation

LEARNING OUTCOMES

Building on the knowledge gained in part 1 of the training programme this part will further develop the skills and attitudes required to independently perform EBUS.

Part 2 of the EBUS training programme will cover all learning outcomes in the curriculum up to the 'knows how' and 'shows how' (level 2-3) of the Miller's Model of clinical competence.

Millers Model of clinical competence



Miller GE. The assessment of clinical skills/competence/performance. Academic Medicine (Supplement) 1990; 65: S63-S7.

TEACHING AND LEARNING METHODS

Directed learning
Self-regulated learning
Independent learning
Observation of EBUS procedures in a clinical setting

ASSESSMENTS

EBUSAT and direct observation

AMSTERDAM

Monday	**Active clinical observation**	**Amsterdam UMC, location VUMC**
09:00 – 09:30	Introduction to the procedure	J. Annema
09:30 – 15:30	Active observation and discussion of EBUS procedures	J. Annema
Tuesday	**Simulator training**	**Amsterdam UMC, location AMC**
09:00 – 09:30	Introduction to the simulator	L. Crombag
09:30 - 16:30	Directed, self-regulated learning	M. van de Pol
Wednesday	**Active clinical observation**	**Amsterdam UMC, location AMC**
09:00 – 12:30	Active observation and discussion of EBUS procedures	J. Annema, L. Crombag, P. Bonta
	Simulator training	**Amsterdam UMC, location AMC**
13:00 - 15:30	Directed, self-regulated learning	M. van de Pol
15:30 – 16:15	Test and certification (participant 1)	J. Annema, L. Crombag, P. Bonta
16:15 – 17:00	Test and certification (participant 2)	J. Annema, L. Crombag, P. Bonta

ATHENS

Thursday	**Active Clinical observation**	
09:00 – 12:30	Observation and discussion of EBUS procedures	G. Stratakos, S. Chrysikos
	Simulator training & assessment	
13:00 – 14:30	Introduction to the procedure and the simulator	G. Stratakos S. Chrysikos
14:30 – 17:00	Directed, self-regulated learning	G. Stratakos S. Chrysikos N. Anagnostopoulos P. Emmanouil
Friday	**Simulator training & assessment**	
9:00 – 12:30	Observation and discussion of EBUS procedures	Gr. Stratakos Ph. Emmanouil
13:00 – 15:30	Directed, self-regulated learning	Simulator assistant S. Chrysikos, N. Anagnostopoulos, P. Emmanouil
15:30 – 16:15	Test and certification (participant 1)	G. Stratakos, S. Chrysikos
16:15 – 17:00	Test and certification (participant 2)	G. Stratakos, S. Chrysikos

COPENHAGEN

Monday	**Simulator training (CAMES)**	
13:00 – 14:30	Introduction to the procedure and the simulator	A. Orholm Nielsen
14:30 – 17:00	Directed, self-regulated learning	Simulator assistant
Tuesday	**Simulator training & assessment (CAMES)**	
09:00 – 12:30	Directed, self-regulated learning	Simulator assistant
13:00 – 13:30	Test and certification (participant 1)	A. Orholm Nielsen
13:30 – 14:00	Test and certification (participant 2)	A. Orholm Nielsen
Wednesday	**Active clinical observation (Bispebjerg University Hospital)**	
08:00 – 15:00	Active observation of procedures in a clinical setting	

HEIDELBERG

Tuesday	**Active clinical observation**	
09:00 – 12:30	Active observation and discussion of EBUS procedures	F. Herth, K. Kontogianni
	Simulator training	
13:00 – 14:30	Introduction to the procedure and the simulator	F. Herth, K. Kontogianni
14:30 – 17:00	Directed, self-regulated learning	Simulator assistant
Wednesday	**Simulator training & assessment**	
09:00 – 15:30	Directed, self-regulated learning	Simulator assistant
15:30 – 16:15	Test and certification (participant 1)	F. Herth, K. Kontogianni
16:15 – 17:00	Test and certification (participant 2)	F. Herth, K. Kontogianni

PROGRAMME IN DETAIL

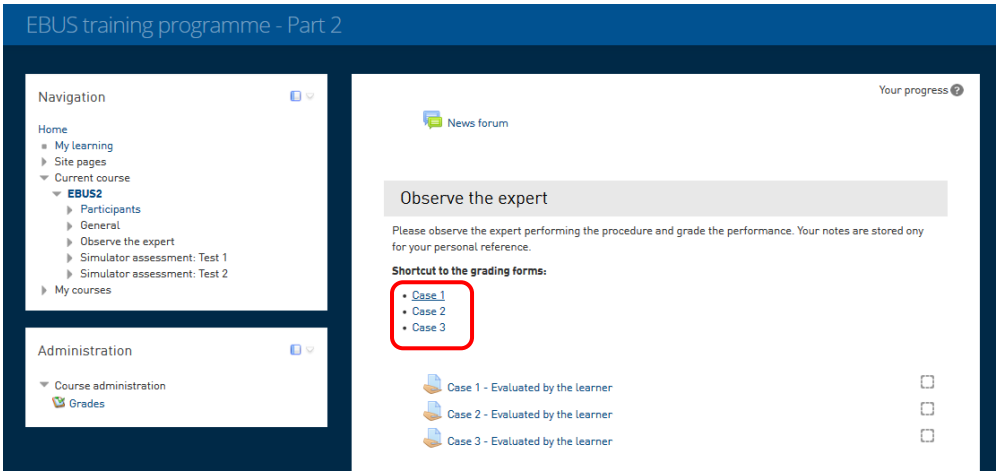
ACTIVE CLINICAL OBSERVATION

This part of the training allows you to see the EBUS procedure in a real-life setting. The teacher (expert) should take time prior to the procedure to talk you through the indications, the planning of the procedure and how the patient will be prepared for the procedure.

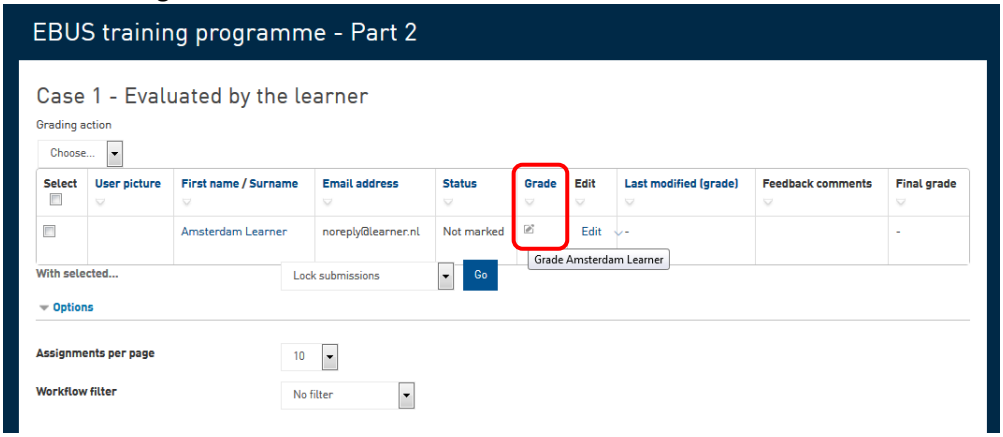
To ensure that you make the most of this active observing opportunity, you will be asked to rate the teacher's performance on **three cases** using the EBUSAT framework (directly in the assessment platform). You can also note down any comments or reflections you have during the procedure to discuss with the teacher at an appropriate moment during or after the procedure. Participants should enter this data onsite and no longer than 5 days after the end of the course. This is a requirement for participants to pass Part 2 and be eligible to go on with Part 3 of the training programme. Detailed instructions on how to enter the necessary data follow:

1. Please access the platform using your personal login:
   https://education.ersnet.org/course/view.php?id=69

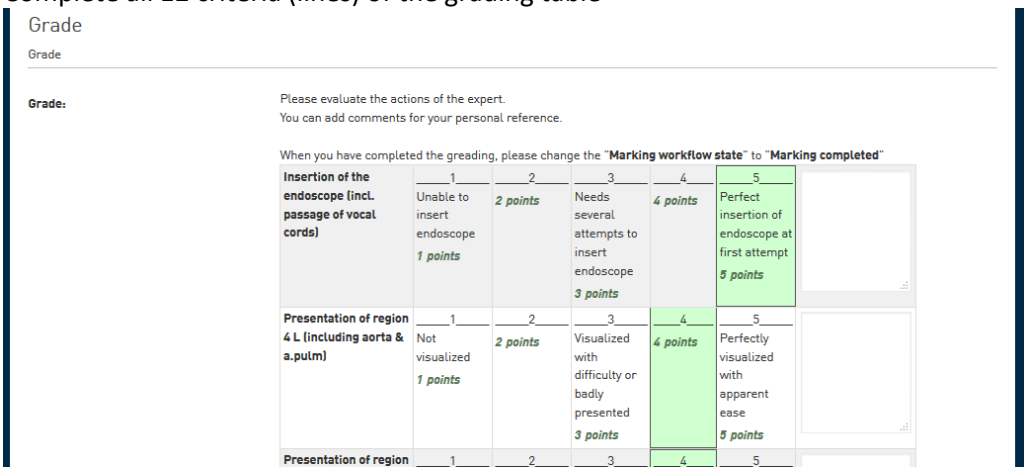
2. Within the first module, choose the case that you want to rate:



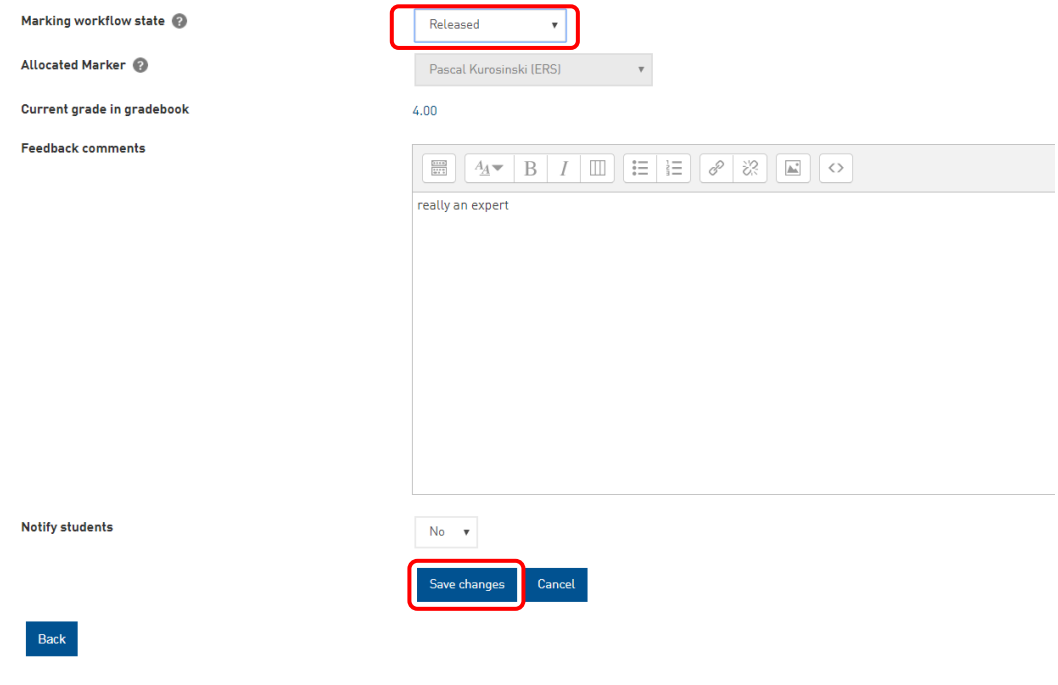
3. Click on the 'grade' icon:



4. Complete all 12 criteria (lines) of the grading table



5. Scroll down to "Marking workflow state" and
   a. Change the 'Marking workflow state' to 'Released'
   b. Add any comment or reflection that you want save <u>for your personal use</u>
   c. Click 'Save changes'



6. Click 'Continue', scroll down and click 'Back to the course homepage'.
7. Should it not be possible, please use the below paper form for your reference and transfer the data to the online platform as soon as possible.

	Performed by supervisor	Performed with guidance	Performed by trainee with no or minimal guidance				
Insertion of the endoscope (incl. passage of vocal cords)	☐	☐	1 Unable to insert endoscope	2	3 Needs several attempts to insert endoscope	4	5 Perfect insertion of endoscope at first attempt
Presentation of: region **4 L**	☐	☐	1	2	3	4	5
region **7**	☐	☐	1	2	3	4	5
region **10/11L**	☐	☐	1	2	3	4	5
region **10/11R**	☐	☐	1	2	3	4	5
Azygos vein	☐	☐	1	2	3	4	5
region **4 R**	☐	☐	1 Not visualized	2	3 Visualized with difficulty or badly presented	4	5 Perfectly visualized with apparent ease
Orientation overall	☐	☐	1 Totally unacceptable investigation	2	3 Acceptable but unsystematic investigation	4	5 Systematic and thorough investigation demonstrating perfect knowledge of the anatomy
Biopsy sampling: Positioning of transducer	☐	☐	1 Major flaws in positioning	2	3 Some problems with positioning	4	5 Perfect positioning of transducer every time
Biopsy sampling: Use of sheath	☐	☐	1 Sheath is used incorrectly with great risk of scope damage	2	3 Insecure localization of the sheath during the procedure	4	5 Perfect use of sheath
Biopsy sampling: Use of needle	☐	☐	1 Targeted sites are missed and/or important structures are damaged	2	3 Insecure use of needle with a few errors	4	5 Perfect use of needle in every procedure
Biopsy sampling overall	☐	☐	1 Biopsies performed with major risk to the patient/equipment	2	3 Possibility of inadequate biopsies due to insufficient technique	4	5 Perfect sampling with excellent technique

SIMULATION BASED TRAINING

After the introduction to the simulated EBUS procedure, you will have the opportunity to practice the EBUS procedure on the simulator. During the self-training session, you will follow the programme that is provided, completing the tasks and cases on the EBUS module. A training assistant will be available for support and guidance.

SIMULATED EBUS ASSESSMENT

The test consists of 2 EBUS procedures on simulator patient cases. The participant will have to perform a complete procedure including introduction of the scope, identification of the six anatomical landmarks in the correct order, checking for enlarged lymph nodes and obtaining two biopsies from one of the stations.

The targeted goal is to perform the procedure consistently and in a secure fashion in less than 10 minutes. You will have a maximum of 2 opportunities to pass the test onsite. If the assessment is failed you will need to re-sit part 2 of the training programme.